

CITY OF CHATTANOOGA
STORM WATER REGULATIONS BOARD MEETING
CITY COUNCIL MEETING ROOM
FIRST FLOOR, CITY HALL

OCTOBER 14, 1999

BOARD MEMBERS PRESENT:

RAY CHILDERS, CHAIRMAN
MIKE POE, VICE CHAIRMAN
EVELYN LOVELADY
VICKI JAMES
CHARLES SHAW
TONY WILLIAMS

ALSO PRESENT:

GEORGE EVANS
DOUG FRITZ, WATER QUALITY SUPERVISOR
PHILLIP LYNN, CITY ENGINEER
JACK MARCELLIS, PUBLIC WORKS ADMINISTRATOR
MIKE PRICE
CAROL PUTNAM, STORM WATER MANAGER
MICHAEL MCMAHAN, CITY ATTORNEY'S OFFICE
CAROL SIVLEY, LANDSCAPE PLANS REVIEWER
TIM MCDONALD, BIOLOGIST

ORIGINAL

I N D E X

	<u>Page</u>
Opening Remarks	
By Chairman Childers.	3
Progress Report	
By Carol Putnam.	4
Discussion on Landscape Ordinance	
By Carol Sivley.	8
Discussion on Education	
By Tim McDonald.	14
Discussion on Streams/Sampling	
By Doug Fritz.	21
Discussion on Sewer Overflow	
By Jack Marcellis.	30
Discussion of Storm Water Projects	
By Carol Putnam.	34
Hearing of Appeals.	42
Discussion by Mike McMahan.	52
Discussion of Fees	
By Carol Putnam.	54
Closing Remarks	
By Chairman Childers.	58

1 BY CHAIRMAN CHILDERS:

2 My name is Ray Childers. I am the Chairman
3 of the City of Chattanooga Storm Water Regulations
4 Board. This is a meeting of the Chattanooga Storm
5 Water Regulations Board. It was advertised in the
6 newspaper on Thursday, October the 7th, and as such
7 meets the provisions of the act to duly constitute a
8 meeting of this type. We have a lengthy schedule
9 today. The first thing I'd like to do is to call the
10 roll. Derek Henry? Not here. Evelyn Lovelady? Not
11 here. Vicki James?

12 MS. JAMES: Here.

13 CHAIRMAN CHILDERS: Mike Poe?

14 MR. POE: Present.

15 CHAIRMAN CHILDERS: Charles Shaw?

16 MR. SHAW: Here.

17 CHAIRMAN CHILDERS: Tony Williams?

18 MR. WILLIAMS: Here.

19 BY CHAIRMAN CHILDERS:

20 Okay. That means that we've got -- of
21 seven of us, we've got five here. We have a forum
22 and we can proceed with the business.

23 The staff of the Public Works
24 Administrator, City Engineer, Storm Water Manager,
25 and the Special Counsel for the City -- Mr. Lynn, I

1 know he's here. Carol is here. I don't see Mike
2 McMahan or Jack. They may be coming.

3 The board members have had mailed to you a
4 copy of the last minutes of the last meeting of June
5 the 11th of '98. Are there any additions or
6 corrections to those minutes?

7 MR. POE: I move we adopt the minutes.

8 MS. JAMES: I second.

9 CHAIRMAN CHILDERS: A second to adopt those
10 minutes. All in favor say, aye. Opposed, no. Okay.
11 Note the aye's have it. Those minutes will be
12 considered adopted.

13 The next item on the agenda will be the
14 manager's reports. I'll turn that over to Carol.

15 BY MS. PUTNAM:

16 I'm Carol Putnam. I'm the Storm Water
17 Manager. I want to give you kind of a progress
18 report on what we've done for the last year. We'll
19 start out -- within your packet you have an
20 organizational chart. Does everybody have their
21 packet with them? If not, we made some extras up.

22 There's an organizational chart and -- we
23 have now been fortunate enough to hire the additional
24 manpower. We have taken the city and put it into the
25 six drainage basins. There are several things on

1 this map right here, that we'll cover as we go. If
2 you go in your board packages and start from the
3 front, we'll walk you through everything you need.

4 On your organization chart the city is
5 divided up into six drainage basins. We were able to
6 hire one engineering design type person and one water
7 quality person to work each of those basins. This
8 has enabled us to do a lot of marvelous things. Our
9 response time is down to just one to two days,
10 instead of weeks and months.

11 We also have given each of them the
12 responsibility to organize the work within their
13 area. We will cover some of that later when we talk
14 about how we've been spending our storm water fee
15 over the last several years.

16 The sheet behind the organizational chart
17 gives you a description of each of those basins and
18 it gives you the names of the pairs that cover the
19 areas. You also have a small map that also is a
20 small version of this large one.

21 We had several purposes for setting up the
22 organization like this. We have an annual permit
23 that we have to comply with each year and send to the
24 State. We organized ourselves in a way that
25 everything we do is just helping us track those

1 records and achieve those objectives and those
2 requirements in our annual permit. This is just
3 making us a better and stronger program. These
4 people are learning a lot of interdependence on each
5 other and are doing a superb job. Most of the people
6 in this audience are Storm Water people. As we go
7 through, you're going to hear presentations by all of
8 those people.

9 We have a Best Management Manual that was
10 written in 1993. It is now a bit obsolete.

11 CHAIRMAN CHILDERS: Let the record show that
12 Evelyn Lovelady just came in.

13 BY MS. PUTNAM:

14 We have a Best Management Practice that
15 covers our construction work and tells them how to do
16 things in order to keep from tracking out in the
17 street, silt running into the drains, and just
18 general good practices of good housekeeping. We are
19 in the process of re-writing that. We had a review
20 earlier today. We're going to do something really
21 great with this thing. We're trying to put out one
22 manual for construction that will cover all the
23 cities within Hamilton County and Hamilton County.
24 We will all be operating out of one manual, so as
25 people go from place to place they only have one

1 thing to deal with.

2 We are also working on writing a Best
3 Management Manual for the industrial side of the
4 business because we're required to do industrial
5 inspections. We have found that they are doing a
6 superb job. They are trying in most all the
7 industries to have good behavior so what we're trying
8 to do is help write a B.M.P. for that area to make
9 that a little bit consistent and assist them.

10 The next item that we have on our
11 agenda is something that, apparently the city and the
12 county have been working on quite some time, R.P.A.
13 That is developing a Landscape Ordinance for the City
14 of Chattanooga. There's a lot of benefits to this.
15 It was adopted into R.P.A. and then it was eventually
16 moved into Storm Water. I have asked Carol Sivley,
17 who has been an employee of R.P.A. for a while and
18 then came to Storm Water on July 1st, to give you a
19 background and a little bit of an update on the
20 Landscape Ordinance and how it affects Storm Water.
21 You have a flyer in front of you that she'll talk
22 about.

23 BY MS. SIVLEY:

24 You've got a handout that looks something
25 like this. I've marked mine up a lit bit. I'm here

1 today to give you a brief overview of the Landscape
2 Ordinance and how that helps Storm Water Management
3 achieve its water quality goals set out in its
4 permit.

5 The purpose of this ordinance is on this
6 page here. This is drawn directly from the ordinance
7 language. All of the items on this page don't
8 necessarily pertain to Storm Water. They're all
9 important, but mainly the ones that go with Storm
10 Water are: No. 1, improving water quality. That's
11 the most important part of the Landscape Ordinance is
12 how it affects the Storm Water Management Program.
13 Also, reducing storm water run-off and providing
14 relief from heat, glare, dust and debris. The
15 transition between incompatible uses is also an
16 important part of how the Landscape Ordinance helps
17 with Storm Water. That is one of the items that I'll
18 talk about a little bit later on to explain how
19 that's important, along with the others.

20 There are activities that trigger the
21 ordinance. You have to comply with the Landscape
22 Ordinance by complying with Storm Water Management
23 Ordinance on our Land Disturbing permit. It was
24 added to the Land Disturbance permit September 1 of
25 1998. Whenever people bring plans for any new

1 development, public or private, any expansions on
2 building or parking lots, they have to have those
3 plans come through Storm Water. We review them and
4 make sure that they are in compliance with Storm
5 Water and also the Landscape Ordinance. There are
6 some exemptions that don't have to comply with that
7 and that's detached single family housing and also
8 attached housing that's fewer than four units.

9 The Storm Water Ordinance short course on
10 how to comply was added to the erosion class this
11 past year so I was able to give a presentation to the
12 contractors, the engineers, and other interested
13 folks who need to learn about how to apply the
14 Landscape Ordinance. That was added to the erosion
15 class this past year. I was able to give a
16 presentation there to help educate the public on how
17 you go about using the Landscape Ordinance to be in
18 compliance.

19 The screening requirements that are shown
20 on this page -- this is an example of two different
21 types of zoning in the city. One is a low-impact
22 usage which is like R-1, single family housing; then
23 an R-T/Z zone, which is something like a townhome
24 development. Our screening requirements, as called
25 out in the Landscape Ordinance are actually developed

1 on a matrix. You can look to see if you're in a
2 commercial zone and you're building up next to a
3 residential zone, how much screening is actually
4 required between the two to provide a buffer so that
5 we do give that transition between incompatible land
6 uses and so that any new development will not impact
7 a lesser intensive area as greatly.

8 The last area that I want to talk about is
9 one of the ones that is most pertinent to the Storm
10 Water permit. Its goals are water quality. That is,
11 that the Landscape Ordinance actually gives people an
12 incentive to develop along streams and leaving
13 barrier areas or buffer areas on either side, that
14 will keep any development from destroying and
15 impacting those stream channels. In these buffer
16 areas, on either side, there is a calculation that
17 you use for the actual width of the stream and it's
18 up to three times the width is what the buffer can
19 be. So that's what the 20 and the 60 refer to here.

20 In order to be eligible for a possibility
21 of up to a 25 percent reduction in your storm water
22 fee, we're encouraging people to develop with this in
23 mind: Leave those natural buffer areas along the
24 side, you cannot remove any vegetation, except
25 non-native species, you can do no filling or cutting

1 in these areas, you can do no storage or any
2 equipment be parked there, and there can also be no
3 impervious surfaces installed in these areas. What
4 that does to help ensure the health of this storm
5 water conveyance here is that it will help stabilize
6 the channel because it will promote a stable channel
7 with no silting or erosion along the banks because
8 it's been cleared all the way to the banks or
9 changed. Also, this landscape material that's along
10 here will help to filter out oils and garbage -- I
11 mean, oils and grease that might be there. Actually,
12 the water flowing through the grassy areas and the
13 vegetation areas will actually help remove some of
14 that before it gets to the stream.

15 One of the most important aspects of this,
16 which Doug will talk about a little bit later on in
17 his presentation, is that it helps cool the water.
18 When you cool the water in here it helps facilitate
19 the breakdown of plant materials and things that
20 provide nutrients for the little bugs in the water.
21 When you've got good bug life in your stream, as Doug
22 tells me, you've got a healthy stream.

23 In conclusion, I just wanted to say that
24 this first year of the Landscape Ordinance I've been
25 working closely with the Storm Water department, the

1 whole time. My office has been in one area but I've
2 been spending most of my days in the Storm Water
3 office and it's been a pleasure to work with this
4 group of people. I'm happy to be a part of the team.

5 Already, I think we can see the benefits.
6 Even though this Landscape Ordinance is in its
7 infancy, already we can see the benefits of the
8 Landscape Ordinance. Every time we have a contractor
9 come in and we explain to him, here is the reason
10 why, here are some of the benefits, and here are some
11 programs that we can offer you, I think it helps
12 promote what the goals are for the Storm Water
13 Management. I'll take any questions if anybody has
14 any questions.

15 MR. WILLIAMS: What kind of bugs?
16 Everybody smiled at you when you said it. I just
17 wanted to know.

18 MS. SIVLEY: He's the bug guy. He has a
19 great big long name for it. I call them bugs.

20 MR. POE: I just have a question. I made
21 sure I was at the last meeting. What is the
22 relationship between this Board and this Ordinance?

23 MS. SIVLEY: The Landscape Ordinance?

24 MR. POE: Yes.

25 MS. SIVLEY: It's called out in the

1 Landscape Ordinance that your actual permission is on
2 the Land Disturbing permit. The Land Disturbing
3 permit is a Storm Water permit. You have to get that
4 permit from Storm Water to do any kind of filling or
5 cutting or demolition, new construction or
6 renovations.

7 MS. PUTNAM: This ordinance was brought
8 into the zoning though; was it not?

9 MR. POE: It says it goes to the Zoning
10 Board.

11 MS. SIVLEY: Yes, it does. For instance,
12 if someone feels they don't have need to comply with
13 the Landscape Ordinance all around, the way the
14 formulas work out that they're supposed to comply,
15 then they have the opportunity to go to the Zoning
16 Board of Variance and seek a variance for that. We
17 have had several people go to the Board in the last
18 little bit. I don't think any variances have been
19 granted, except maybe this last one. The ones that
20 have been granted are ones that we have supported
21 because it made sense in their situation. Sometimes
22 it's because their site is so small. Sometimes
23 because they just don't want to comply.

24 MR. POE: This Board won't hear that?

25 MS. SIVLEY: Not for the Landscape

1 Ordinance. It will be heard in the Zoning Board of
2 Variance.

3 MS. PUTNAM: Next, we'll have Tim McDonald,
4 who will give you an overview of our four main
5 education programs we have going on.

6 BY MR. MCDONALD:

7 Thanks, Carol. As Carol said, I'm Tim
8 McDonald. I'm going to touch briefly on our
9 education and public awareness program.

10 We have as part of our permit -- our permit
11 as we discussed, covers everything we do at Storm
12 Water. We have the requirement to have a public
13 education and information and involvement practices
14 as an integral part of the Storm Water program. What
15 we want to do is educate the public. We want to get
16 them involved in the structured pollution prevention,
17 conservation and clean-up activities that we're in
18 and get them working together with us so that the
19 overall end result is hopefully improved behavior on
20 everybody's part and clear water.

21 We have about four dimensions, four or five
22 dimensions to our education program. The first is
23 that we offer a four-hour erosion control school.
24 Doug Fritz from Storm Water teaches that typically.
25 We invite land developers, contractors, industrial

1 owners, people from other agencies or the city
2 agencies, a number of the public works people who
3 come, people from the Tennessee Department of
4 Transportation have come. We provide a certificate
5 and small green card to carry as evidence of that
6 certification at the end of the course. What we
7 cover in the course are the principles of erosion
8 control and conservation that we developed in our
9 Best Mangement Practices Manual and that we have
10 taken from the International Erosion Control
11 Association, which is the professional association
12 that certifies people in managing erosion. Most
13 people are not aware of that association, but Doug
14 does belong and we do subscribe to their information.

15 The second part of our program -- also, we
16 have an eight-hour seminar that we offer over at
17 typically Chattanooga State on development and
18 regulations from the Storm Water perspective. We
19 have a multiple agenda there with different speakers
20 who present information to the participants over
21 there.

22 The second aspect is our schools program.
23 Each of you has a green packet in front of you that
24 has information that we take to the principals and
25 teachers at our fourth grades in the public,

1 parochial, and private schools that are in the city
2 limits. We structure it for the fourth grade level.

3 In your folder, you will find the handouts
4 that we provide the public. You will find an
5 overview of the lesson plan, a C.C.R. coloring book,
6 which I understand made its way all the way to
7 Michigan. There are additional coloring books if
8 anybody's interested in them on the other side of the
9 room.

10 We took our curriculum and what we do is we
11 begin by teaching some vocabulary to the students.
12 We discuss our watersheds. We have the students
13 participate in an interactive program. We have a
14 mock storm drain. We have them talk about rainfall
15 and run-off and so forth. We have the students to
16 put various pollutants in the storm drain, follow
17 that by some rainwater, then at the end of the
18 presentation we compare clean water to polluted storm
19 water and then from that go on to explain that storm
20 water pollution ultimately leads to problems with our
21 clean water, including our drinking water.

22 We took the curriculum and matched it to
23 the benchmarks that the Hamilton County School System
24 has developed for the fourth grade, including a brief
25 discussion of the scientific method. We are fitting

1 it to the curriculum the public school has.

2 At this point we plan for presentations in
3 27 of the local schools. We take the packets to the
4 principal and fourth grade teachers. We set up the
5 appointment with them to come and do the
6 presentation. Typically, most of these are in the
7 fall. We schedule according to when they want us to
8 come. We'll have approximately 75 to 100 fourth
9 grade students. That's an average, so we are
10 probably going to present the material to at least
11 2,000, probably close to 2,400 or 2,500 students this
12 year. We're real excited about that.

13 That leads us to our web page information.
14 You have a copy of our web page in your packets or
15 actually it's a separate handout. Our web page is
16 part of the city's web site and it's under the public
17 works page. It's a part of the engineering storm
18 water section. In the web page, as you see from your
19 copies, we list points of contact for the various
20 situations you may need to contact Storm Water about.
21 We have a brief discussion of program areas and we
22 offer the C.C.R. coloring book to be downloaded if
23 someone wants to do that for children to use as a
24 good tool. Those are on the web page and we
25 encourage you to look at that. We do update that

1 monthly. We haven't done anything with it in
2 October. After the board meeting is over, I guess
3 there are some things we need to change for that.

4 The fourth aspect of our education program
5 is our involvement and participation with the
6 Chattanooga Environmental Education Alliance. Some
7 of you may be familiar with that. That's a local
8 coalition of agencies, organizations in Chattanooga
9 who have the mission of coordinating education and
10 providing increased opportunities to educate the
11 public about environmental issues that affect the
12 community. Other city agencies participate. City
13 wide services does, Tennessee Department of
14 Environment and Conservation participates, Scenic
15 City's Beautiful Commission participates, the
16 university sends a representative, the local schools
17 send representatives. We meet with them monthly. We
18 participate in the Earth Day event, usually with an
19 interactive display, like we've done with the
20 schools, then participate in different things that
21 they have going on during the year.

22 We have a story book also that is up here
23 for the board members to look at. That has photos of
24 how things work, how things are better. We can take
25 that to various presentations that we do to provide a

1 good visual tool for explaining what we've done on
2 educating the public on what we've done over the past
3 year, past two years, and so fourth.

4 Any questions that I can answer?

5 MR. SHAW: Did we make the coloring book
6 here in Chattanooga?

7 MR. MCDONALD: Yes, sir. We did.

8 MR. SHAW: It was somebody's brainchild here
9 and then Michigan stole it?

10 MS. PUTNAM: No. We have an artist, Ken
11 Whitaker, that was on contract with us that helped
12 us. He came into our office several times and spent
13 time with everybody in our office to see what they
14 do. He has a page in there for everybody that works
15 in Storm Water and what they do. So what you see is
16 a day in the life of a Storm Water person. It was
17 fun. It was fun to have him come around. We named
18 the pages according to who's who in there.

19 On each page, when you open it up on the
20 bottom of the page, if you want information on
21 environmental issues, it has Doug's telephone number.
22 If you need any information on brush and trash
23 pick-up, it has city yards's phone number. Each page
24 on the bottom of it, has the reference telephone
25 number and how to get the assistance on that

1 information. We enclosed the recycling because
2 that's a very important issue for us.

3 MR. SHAW: I didn't know I could take my
4 used battery that I've had for a year now and go to
5 the recycling.

6 MS. PUTNAM: Success.

7 MR. MCDONALD: Any other questions that I
8 can answer for you?

9 BY MS. PUTNAM:

10 We're going to come to the money part now.
11 Storm Water's been collecting the fee for six years.
12 We wanted to look back and see where have we spent
13 the money over those years. What we've done is we've
14 made our dot map up here and we're going to have
15 different people come up to tell you what the
16 different color dots mean and what we've gotten for
17 our money and what we need to look forward to and
18 maybe anticipate more expense.

19 We have an identification marker up in the
20 front. The red is spills and emergency responses.
21 The blue is water quality from the streams and U.T.C.
22 sampling. The blue is completed construction
23 projects. The yellow are some of the ones we feel
24 are a little more urgent but they're on here. The
25 black we will cover at the very end of the meeting.

1 Those are people who have been exempted from the fee.
2 We'll discuss that at the end of meeting.

3 To open up our discussion on the money we
4 have spent, we'll start on the environmental. Doug
5 will come up and talk about spills, emergency
6 responses, and the green dots with the water quality
7 sampling. This is Doug Fritz, our Water Quality
8 Supervisor.

9 BY MR. FRITZ:

10 We mentioned several times this permit that
11 we follow and go by. Does everybody still have their
12 copy or do we need to mail a copy to any of you? If
13 you want a copy of the permits so that you can see
14 what we're charged with, just let us know and we can
15 get it to you.

16 As Carol mentioned, we deal strictly with
17 water quality and I'll concentrate on the red and the
18 blue dots or the green dots -- excuse me. In the
19 last two years we've contracted with U.T.C. to
20 conduct a lot of our sampling. They have taken
21 approximately 6,000 individual parameters that they
22 have tested for. We could stay here all night and
23 still not cover them all, so what I chose to do is
24 just give you a broad overview using a couple of
25 basic biological parameters.

1 They are listed in the handout that you
2 went through. If you have any questions about
3 anything, feel free to contact me, stop in the
4 office, or anything like that. What I'm going to do
5 is just give you an overview of what I put in there.

6 E.P.A. said, and I'll read it to you so I
7 can quote it. "Where criteria for specific ambient
8 impacts don't exist" -- what that means is non-point
9 source pollution. That's really what we're dealing
10 with inside the city. Whether you have a dog that's
11 gone to the bathroom or you have a construction site
12 or you have something leaking there, it all adds to
13 impact on our system, on the system within the city
14 limits. "Biological communities may be the only way,
15 in the practical means for the evaluation". We can
16 talk about any chemical parameter you want to talk
17 about, but if you test the biological parameters it's
18 going to come out here.

19 We chose specific watersheds. We didn't
20 concentrate on the large streams, South Creek,
21 Chickamauga Creek, North Chickamauga Creek, Lookout
22 Creek. Our feeling was the majority of that water
23 starts in another state or another city out in
24 Hamilton County. There's not a whole lot we can do
25 to improve water quality if it's already bad when it

1 comes in.

2 What we chose to concentrate on is our
3 small or medium-sized streams, Mountain Creek,
4 Nine-Mile Branch, Black Creek, Citico Creek, Mackey
5 Branch and Friar's Branch and a lot of little
6 tributaries down in the Chattanooga Creek area.
7 Every little green dot is where U.T.C. has sampled.

8 The first thing that we looked at, we
9 looked at what is called -- Carol -- aquatic
10 macroinvertebrates. Basically what that is, if a bug
11 can live in water -- they sampled it, they identified
12 it -- they said, would it be here if the water was
13 good? Would it be here if the water was bad? What
14 we have was a quarter of our streams or a quarter of
15 the sites we looked at, rated poor in water quality.
16 Sixty-seven percent of them rated fair or less.

17 Why do we look at bugs, you say? Bugs are
18 a good short-term indicator of what the water quality
19 is in the stream. If something comes through or
20 there's a chemical comes through or the water goes
21 dry, there's no water in the stream. The first thing
22 that comes back after that is the bugs. That's a
23 short-term thing. Again, a quarter of the population
24 samples we looked at were poor.

25 The second thing that we looked at, we

1 looked at our fish populations. If you look at the
2 fish population, you look at the long-term health of
3 that stream. If it's a long-term health, the fish
4 population is going to be there. It's going to be
5 good because the stream is good in water quality. If
6 it's not good in water quality, it's going to be
7 poor.

8 Our findings were -- we sampled twice a
9 year. In the wet season, the wintertime, 48 percent
10 of our streams that we sampled were poor, 71 percent
11 of the streams were fair or less. When it came into
12 the dry season into the summertime, 95 percent of our
13 streams rated poor, and 100 percent rated fair or
14 less.

15 There are several different reasons. In
16 the summertime, again, if there's no canopy as the
17 sun is beating down, the water temperature rises and
18 the fish can't live. With the amount of impervious
19 surface that we have in this city, we don't have a
20 lot of water going back into the ground. It runs off
21 very quickly. The water isn't there in the
22 summertime.

23 The other thing that it does with this
24 impervious surface that we're talking about is, as it
25 runs off quicker it destabilizes the channels that we

1 have. What we're finding right now with U.T.C.'s
2 data is I can tell you right now that right here,
3 somebody is putting a thousand gallons of oil and we
4 can't tell if it has any effect because the channels
5 are so unstable, they don't have enough habitat to
6 tell anything, there's so much sediment load in the
7 bottoms of the streams, they're so much erosion in
8 the banks, that there is so much habitat lost and so
9 much extreme health problems due to just the sediment
10 and the erosion. Oddly enough, that's the same thing
11 that drainage deals with every day when we get an
12 erosion complaint that somebody's losing property or
13 somebody's flooding. It all relates back to this.

14 What we're going to do with this is, we are
15 going to go back -- we have several sites that are
16 instantaneous health improvements. For instance, we
17 found a site up here on Nine-Mile Branch. To get a
18 little technical, the dissolved oxygen, the amount of
19 oxygen in the summertime or in the water for animals
20 to live and breathe in, from this point down in the
21 summertime, there is none. The reason for that is
22 just upstream from it the cows are laying in the
23 creek and doing their business in the creek. As that
24 organic matter decomposes it robs all the oxygen.

25 What we intend to do in the next year

1 is go in and work with the Department of Agriculture,
2 Natural Resources Conservation Services, get the
3 money for grants, work with the land owners to get
4 the cows moved out of the creek.

5 On another section, on Citico Creek the
6 average temperature in the summertime is ten degrees
7 Celsius hotter than any other stream in the city.

8 CHAIRMAN CHILDERS: Why is that?

9 MR. FRITZ: There's no canopy. The place
10 that we were sampling is a W.P.A. channel. It has
11 fish in it. The average depth is two inches. The
12 average width is 12 feet. There's no canopy at all.
13 The city happens to own that land, so we can go in
14 and put some trees in there relatively quickly.
15 We've got some canopy so we've got something to cool
16 the water down. That's where we're going to use a
17 lot of this data. We're supposed to. The state
18 permit does say that we're supposed to monitor, find
19 out what the quality of our streams are, do long-term
20 monitoring to see if we have improved water quality
21 or if it doesn't help at all. By doing these things,
22 I think we can effectively demonstrate that water
23 quality is improved because the temperature went
24 down.

25 I want to switch gears here a little bit

1 and talk to you about another study that we did with
2 U.T.C. It was monitoring fecal coliform. One of the
3 issues that is in the permit is we have to do a pilot
4 study to determine the amount of sanitary sewage or
5 the amount of sewage that's coming into the storm
6 water system. The way we chose to do that was we
7 chose a hundred sites across the city, as per the
8 permit, with a lot of them concentrated in
9 Chattanooga Creek. We took ten samples per year at
10 each site and did a coliform test. Coliform is a
11 bacteria. Fecal coliform is a good indicator that
12 there's some sort of organic waste there, whether
13 animal, dog, cat, human, elephant, it doesn't matter.
14 It goes to the bathroom, fecal coliform is going to
15 be present.

16 What we've found is 51 percent of our
17 streams qualify under state recreation standards to
18 be posted against human contact. Fifty-one percent
19 of our sites. If they average greater than 250 fecal
20 coliform colonies per hundred milliliters, that's
21 just if you put a scrape of it on a plate and there
22 are 200 colonies and they're on there and it averages
23 out for ten samples over a 30 day period, they can be
24 posted against contact just like Chattanooga Creek
25 is.

1 We're trying to work and see what causes
2 that. Is it private lines? We're finding a lot of
3 problems with private connector lines to the main
4 sewer. Is it that everybody has their pets right at
5 the channel? Is it our sewer lines? Is there
6 something we can find that we can help Moccasin Bend
7 improve their sanitary sewer lines?

8 Finally, the last thing I want to talk
9 about is the little red dots. If nothing else is
10 exciting, this is kind of our stress break although
11 it's not really a stress break because you're really
12 working hard. This is spill response when we go out
13 with the fire department or we go out with the
14 Hamilton County E.M.S. This is for any chemical
15 release that they merit we need to come out there.

16 Three years ago, when they started
17 bringing us along we had thirty-something. Last year
18 we had forty-something. This year we're already
19 almost up to 70. We wear pagers. There's two pagers
20 in the department. Twenty-four hours, seven days a
21 week. We go out there and assist HAZ-MAT in any way
22 that they request us to do, whether it's tracking
23 down where's it going or our recommendations for
24 cleaning it up. We're at their mercy.

25 You can see most of them are concentrated

1 along -- it's kind of hard to see, but along the
2 major interstate routes. We're finding that the
3 majority of our releases are tractor-trailers, where
4 the cross-over valve or the diesel tank has sprung a
5 leak. At the same time, we've had industrial fires,
6 we've had manufacturers who have dropped drums, we've
7 had railroad cars de-rail. That's just part of our
8 business that we do in water quality.

9 I could go on all night. Do you have any
10 questions over anything that you looked at or
11 anything that I've said?

12 MR. WILLIAMS: Doug, how does our streams
13 rank with other cities? Are you ranking these
14 streams with natural areas like Montana or --

15 MR. FRITZ: Actually, the way that we set
16 it up and that U.T.C.'s doing it, that can be done.
17 You can say this fair rating is equivalent with this
18 fair rating. We have taken a reference site outside
19 the city limits. We're preparing for that. I don't
20 have the data yet, I just used these because they're
21 inside the city. I believe that as these evolve
22 there are some cities across the country that the
23 state has just said, you just do biological
24 monitoring. We're going to be able to tell how
25 effective your programs are if your populations are

1 healthy. I haven't looked at that data. We're just
2 starting to get the data pulled together that U.T.C.
3 has done. We wanted a good statistical set of data
4 before we said this is in terrible shape or this is
5 in terrible shape. You can pick a point one place
6 and you can say this is great or it's bad. We wanted
7 to make sure that we have that same point and now we
8 can look at other ones.

9 MS. PUTNAM: Thank you, Doug. The next
10 area I want to talk about is spending money. Jack,
11 you may have to help me and give me some
12 contributions on what Moccasin Bend is doing.

13 MR. MARCELLIS: Okay.

14 MS. PUTNAM: They're helping us on some of
15 the sliplines and things. I don't know that I have
16 all the areas. We have a list of what is -- it says
17 regulated chambers from the CSO. There's a federal
18 regulation that by July 31st of next year --

19 MR. MARCELLIS: It's July 1 of the year
20 2000, that we'll have to control the combined sewer
21 overflow. Combined sewers are -- back the turn of
22 the century as an inexpensive way of putting in the
23 structure, we put storm water and sanitary sewer in
24 the same line. In one of these areas, one in
25 particular, the Central Avenue, Adams, which is on

1 your list, which is about 35 percent of our downtown
2 area, we're trying to collect and store about seven
3 million gallons of water and keep it from flowing
4 into Chattanooga Creek. Right now we have about 60
5 overflows a year. That will have some sewer storm
6 water going into Chattanooga Creek. At the end of
7 this -- by about the end of the year this facility
8 will be finished. We'll be able to reduce those to
9 only four a year from about 60 and more than three of
10 those four, three and a fraction will be treated to
11 what we refer to as "primary treatment". All of the
12 solids will be removed and not go into the creek.
13 There will be some liquid water that goes in there.

14 On one of your sheets, there are 18
15 different locations. We're solving them by
16 separating the sewer water out of the combination
17 separate sewer lines on two of those facilities. The
18 others are being combined in various manners and
19 we'll have eight facilities in which we will store
20 water to keep it from going into various creeks or
21 into the Tennessee River and then send them to
22 Moccasin Bend.

23 As a matter of fact, we're increasing and
24 spending 30 million dollars at Moccasin Bend so we
25 can treat this added water that's coming. We're

1 adding the ability to treat an extra 80 million
2 gallons a day at Moccasin Bend, so as we will have a
3 much cleaner environment. We're also spending about
4 44 million in these structures that we're building to
5 hold this water and then dissipated at a lower rate
6 to Moccasin Bend after the storm has ended.

7 The oldest and the second biggest one is
8 right in the middle of Ross's Landing, about 3.7
9 million gallons. It's been there since just before
10 the Aquarium has opened. Here we have 100,000 people
11 a day during Riverbend and nobody knows what's right
12 below them. There's no odor. There's no smell.
13 There's nothing to be concerned about as we store
14 this combination sewer water and then send it to
15 Moccasin Bend for treatment.

16 MR. SHAW: Is one of those facilities
17 behind Howard High School? Is that what's being
18 built there?

19 MR. MARCELLIS: That's the largest one that
20 handles about 35 percent of our downtown area right
21 through here (Indicating). It will hold up to seven
22 million gallons of water. That's what I was saying.
23 We normally see about 60 overflows a year. This last
24 weekend when we got three inches of rain -- I don't
25 know this as a fact but I'm sure we had an overflow

1 into the Chattanooga Creek. That is the one we're
2 anticipating be finished and operating by the end of
3 the year on that one.

4 We have that contract underway. We
5 have a contract near Citico Creek. If you drive
6 Riverside Drive, just upstream from the
7 Tennessee-American Water, we have another hole in the
8 ground being built to hold almost two million gallons
9 of water there. We have one at 27th Street, at
10 Williams Street just east of Broad Street being under
11 construction. We have one going out for bid right
12 now that will be at the end of M.L. King, right at
13 the Tennessee River. We've got two more under design
14 and we'll have everything accomplished hopefully by
15 that July 1st, year 2000 date.

16 Any other questions on our combined sewer?
17 I didn't quite know I was going to be part of this
18 but I can discuss it, obviously.

19 MS. PUTNAM: Up to this point, Storm Water
20 has funded --

21 MR. MARCELLIS: Up to this point, Storm
22 Water has funded 50 percent of our CSO construction
23 and the sanitary sewer has funded 50 percent also.
24 We're depleting a lot of our fee dollars because of
25 that. We do want to continue the process of Storm

1 Water not only for quality but also for quantity. We
2 have reduced that down to 25 percent of the CSO's
3 being funded by the storm water fees and then 75
4 percent will be funded by sanitary sewer funds. That
5 will extend and guarantee some extra dollars for
6 Storm Water projects in the next few years. Actually
7 that shifts literally about five million dollars of
8 Storm Water money or CSO money into Storm Water and
9 will allow five more million dollars to stay in Storm
10 Water and the sewer will pick that cost up.

11 Any other questions? They are good
12 questions. Thank you.

13 BY MS. PUTNAM:

14 I'm going to move into the Storm Water
15 projects he was mentioning. On this map, I'll try to
16 identify these. Our letters are real small. They
17 work real good if you are standing over here.

18 You have preventative maintenance,
19 preventative maintenance, preventative maintenance
20 here and down here (Indicating). Those are areas
21 that the program started. The purpose of those is to
22 go in and we start on one end of the basin and we
23 take our big vacuum trucks and they go up and down
24 every street and clean every driveway tile, every
25 catch basin, every pipe. They clean everything they

1 find all the way through that designated area that we
2 have selected. We have assigned one of our drainage
3 people that stay right with that crew all the way
4 through it. We take those areas and we pick out most
5 of the work that is in the city anyway that needs to
6 be corrected; collapsed pipes, failed systems, those
7 types of things. They spend time in each of those
8 sections. It sounds like a lot when you first tell
9 somebody you get to go and you have three months to
10 get as much done as you can.

11 When you start into the last thing, there's
12 a lot to do. On an ordinary day, we get men that
13 will take those calls. How we were selected was, we
14 had the G.I.S. system and we put the dots on maps of
15 where all the complaints were and you back up here
16 and you say, where are the most dots that you see?
17 Where do you go first? It's not as fast as we had
18 hoped to move. We learned several things on how to
19 assist the city yards. We're right now finishing up
20 out here on Highway 58, Jersey Pike, Bonny Oaks area.
21 We've got tremendous support with this program.

22 What we will do is our drainage designers
23 will sit down with the City Council, show the council
24 person what we will be doing on there. We usually
25 get 30 to 40 work orders completed. It has been a

1 process for us. We just need to work a little
2 faster.

3 You have that in your package. It's the
4 Storm Water contract that we have out for bid. We
5 have gotten a lot of work done. We have gotten a lot
6 of excellent work done. The packages and the way we
7 deliver and put it out for bid just gets better and
8 better and better. We put out some contracts last
9 year, managed them a little differently, stayed a
10 little closer to the contractor, both those
11 contractors finished their jobs on time and with the
12 million plus dollars they had about \$100,000 left
13 over in their contract because the contracts were
14 unit price and we only paid for the work they did.
15 At the end of it, we had \$100,000 and we were able to
16 go fix some urgent problems that came up that we
17 weren't aware of. That was very nice.

18 American Manufacturers had a terrible
19 drainage problem that had totally collapsed. Their
20 timing was superb and in about two weeks we were out
21 there fixing their problem. That was only because of
22 how well the contracts were managed, how well the
23 contractors worked with us, and that we only paid for
24 the work they actually performed. We're learning as
25 we go along.

1 Any questions on our construction work? We
2 have one other way -- if someone calls in and a catch
3 basin has collapsed or we have a road hazard or a
4 pedestrian hazard, we have our final resource. We
5 used to call it the top ten list but that top ten
6 list is up to about a top 50 list. We meet weekly
7 with the city yards people and we take down the
8 urgent requests. We have the avenue to handle it.
9 We have the avenue to get to those people. What we
10 have to do in Storm Water -- when I came into Storm
11 Water, city yards had 1,200 work orders down there
12 for them to complete. When we looked at the numbers
13 they could complete six per month. If you divide 6
14 into 1,200 they had more than a lifetime worth of
15 work down there.

16 We pulled all of that work back. We sorted
17 it back out by need. We sorted it by zip code. So
18 far this year, they have done over 300 jobs. It was
19 just a matter of organizing their work so that when
20 they went to one part of town they could pick up and
21 do six or eight jobs instead of one on one side of
22 town and one on another. They spend a lot more time
23 on the jobs and not so much traveling. Also, they
24 don't have 1,200 to pick from to say, do I get the
25 middle of the stack or the top of the stack? That's

1 been very helpful.

2 Any questions on how we're doing contract
3 works or any constructive criticism? We take that
4 pretty well.

5 The next part of the agenda and we're going
6 to ask for comments at this point, before we get into
7 the reviews.

8 MR. SHAW: I'm very impressed with your
9 work. I've even seen a lot of it by my house. I saw
10 that down behind Howard High School. I'm pretty
11 impressed with all of it. I want to ask you this,
12 when this lady was talking about the creeks and you
13 don't clear and cut in that area, that's all a
14 voluntary thing; isn't it? They just get a discount
15 if they do that?

16 MS. PUTNAM: That's correct.

17 MR. SHAW: The first thing I thought of is
18 the brush pit. Are we our own enemy? The city with
19 the burn pit behind the police department just right
20 near the creek?

21 MS. PUTNAM: We had to clean up some of our
22 own behavior.

23 MR. SHAW: We're doing that?

24 MS. PUTNAM: Yes, we are. We're looking at
25 the vacuum truck where it used to dump was close to

1 the creek. We're in the process of almost finishing
2 up there. We've done the same at city yards. They've
3 done wonderful things down there. We have to
4 concentrate on maintenance. Maintenance is always the
5 key.

6 CHAIRMAN CHILDERS: I guess I've got a
7 question. I may need to ask Jack here. I think all
8 of us have read in the paper some information about
9 possible reductions of sewer fees. What impact, if
10 any, will that have on Storm Water Management?

11 MR. MARCELLIS: It shouldn't have any
12 impact on Storm Water Management. The extra dollars
13 that we talked about shifting because of the CSO's
14 will probably come out of the fund balance and the
15 reduction is just going to come out of mostly --
16 well, only part out of it is residential. We're
17 trying hard to see if we can't extend that and see if
18 we can't get into some commercial and industrial
19 quotes, too. We're talking about the block that
20 everyone pays, so there probably will be some savings
21 in everyone's bills that way. It has nothing to do
22 with Storm Water. They're two different funds and
23 two different activities. The only reason we
24 combined the combined sewer overflow facilities is
25 because they're combined as both sewer and storm

1 water.

2 CHAIRMAN CHILDERS: Well, that's a
3 reasonable question then.

4 MR. MARCELLIS: That's the only thing.
5 We'll have money to pick up that cost that we talked
6 about.

7 CHAIRMAN CHILDERS: Other questions from
8 the Board? The other agenda items -- Carol, are you
9 prepared today to go forward with those?

10 MS. PUTNAM: Yes, I am.

11 CHAIRMAN CHILDERS: I suppose that if we're
12 going to have the Storm Water group present the
13 problem or the issue and then give your side of the
14 thing and then take some testimony from the people
15 who have the problems.

16 MS. PUTNAM: I have five sets of drawings
17 here. Three of them, we would like to approve. We
18 recommend approval from the Storm Water Management.
19 One of them, we feel we're not quite ready. We would
20 just like to give the Board an awareness that this
21 will be coming up at the next board meeting. One, we
22 don't give a full recommendation. I had asked Mike
23 Price to come and bring -- to let him present his
24 side of the need for this variance.

25 CHAIRMAN CHILDERS: Okay.

1 MS. PUTNAM: All of these are variances.
2 The reason for the variance is because in the
3 ordinance our requirement is that they have to figure
4 what their storm water run-off would be for a 25 year
5 pre-development run-off rate. Their post-development
6 rate cannot exceed that. They're supposed to build a
7 detention pond or some means of retaining that water
8 and releasing it at a slower rate so that you do not
9 impact the people downstream.

10 CHAIRMAN CHILDERS: The reason I ask is, if
11 the Board is going to be asked to make a decision and
12 vote on whether to support the recommendation or to
13 support the other side, then I suppose it would be in
14 order to have a swearing in here if you or whoever
15 else is going to present that testimony. The lawyer
16 is not here to help us. I think that's what we ought
17 to do.

18 MS. PUTNAM: If we'd like to do the one
19 that we're not sure about last and wait for Mike
20 McMahan to come back in the room?

21 CHAIRMAN CHILDERS: I don't object. I just
22 wanted to ask Mike if it was appropriate for us to
23 swear these other folks if the Board is going to be
24 expected to vote one way or the other on this issue.
25 I think that's what we need to do.

1 MR. POE: It's my understanding if the
2 Board is expected to vote, we need to swear them in.

3 (Whereupon, Mr. McMahan re-entered the
4 meeting.)

5 CHAIRMAN CHILDERS: Counselor, do we need
6 to swear in any of these people here that are going
7 to give testimony?

8 MR. MCMAHAN: Let the court reporter do it.
9 She's duly qualified to do so.

10 CHAIRMAN CHILDERS: Would you do that,
11 please?

12 (Whereupon, all potential witnesses,
13 including George Evans and Mike Price,
were sworn in.)

14 CHAIRMAN CHILDERS: I guess, for the
15 record, you'll identify those in the testimony.

16 BY MS. PUTNAM:

17 We have -- I will cover the sites that we
18 support for approval. This is Heritage Auto Outlet.
19 This development is a rather small site and what
20 you'll see is where the proposed building is going.
21 They will remove some existing curb. It's a minimal
22 amount. The amount of increase is very, very small.
23 The impact, we feel, would be insignificant. The
24 trade-out of those small places for creating a
25 detention pond, the pond would be very small.

1 MR. WILLIAMS: Where is the detention?

2 MS. PUTNAM: This site was constructed
3 prior to any of the Storm Water requirements so all
4 they were doing was modifying and putting in a new
5 building on an old site. There was no pre-existing
6 requirement for storm water run-off. These are the
7 two small grass areas they were removing in order to
8 construct the new structure. This is Heritage Auto
9 Outlet at 6030 Shallowford Road.

10 MR. SHAW: You recommend approval?

11 MS. PUTNAM: We recommend approval. We
12 think this is very minor and insignificant. It's
13 less than --

14 CHAIRMAN CHILDERS: Any questions?

15 MR. POE: I just have a question about what
16 "minor" means. If you get like an inch of rain --

17 MS. PUTNAM: The increase is less than one
18 cubic --

19 MR. PRICE: Less than half a cubic foot per
20 second. You could basically take a pail out there
21 and fill it up two or three times and that's about
22 the difference.

23 MS. PUTNAM: When we look at where so many
24 of these detention ponds are in the city and in some
25 of these one acre and less, we really have to look to

1 see if it's necessary. This is one that, this amount
2 of change we did not feel was a major amount.

3 CHAIRMAN CHILDERS: What's the pleasure of
4 the Board?

5 MR. POE: I have a question. Is it the
6 staff's recommendation that it would not cause any
7 additional flooding by this change?

8 MS. PUTNAM: That's correct.

9 MR. SHAW: I make a motion to accept it.

10 CHAIRMAN CHILDERS: Okay, we have a motion
11 to accept.

12 MR. POE: Second.

13 CHAIRMAN CHILDERS: And a second. All in
14 favor say, aye. Motion is passed.

15 MS. PUTNAM: The next one I have is Gene's
16 Food Mart. It's at 4901 Bonny Oaks Drive. This is a
17 business that has existed and has grown and
18 developed. It is also not a large tract. The
19 acreage on this Mike is --

20 MR. PRICE: The acreage is .95 acres.

21 MS. PUTNAM: If you look on the second
22 page, I believe is the conditions, the current
23 conditions. The shaded area is the green area. This
24 is the same owner as his own piece of property. His
25 business has improved and he's increasing the size of

1 the structure. We've checked the drainage complaints
2 in the area. We have minimal. This will also be
3 about one cubic foot of -- per second of drainage
4 increase --

5 MR. PRICE: For the 25 years, it's about
6 seven gallons a second increase over that 25 years.

7 MS. PUTNAM: We recommend an approval on
8 this one. It's similar to the previous one.

9 MR. SHAW: I make a motion we accept it.

10 CHAIRMAN CHILDERS: We've got a motion to
11 approve. Do I hear a second?

12 MS. JAMES: Second.

13 CHAIRMAN CHILDERS: All in favor say, aye.
14 This motion is approved.

15 MS. PUTNAM: This is East Tennessee
16 Grading, 4325 A Jersey Pike. This is one we're
17 bringing up strictly for information. The maps that
18 we have been supplied only show the road. Storm
19 Water Management does not review road building. We
20 only do lots and development. In the future, they
21 will be bringing this back because this property will
22 be subdivided. There's a large wetland in the back.
23 This is only to let you be aware that the next time
24 you meet, this will probably come with several
25 partials on it and whether they want to use the

1 wetland for the detention area and that will also
2 allow us more time to ensure the wetland is adequate
3 to do that or if the detention will be needed.
4 Whichever way it's needed, water quality will be a
5 very critical issue with the wetland there. This one
6 we will defer to the next meeting. That's
7 information only.

8 Mike, I'm going to do one more and then
9 we'll come back to you. I don't have multiple copies
10 of this. Mr. Evans is here. He is building a --
11 you'll have to help me. I want to say a thrift shop?

12 MR. EVANS: That's fine.

13 MS. PUTNAM: He is constructing a thrift
14 shop on an extremely small personal property. We
15 have -- I don't know if I have enough drawings for
16 all of this. What we have agreed to with Mr. Evans
17 is where we get the benefit of the Landscape
18 Ordinance, that is, if he will do the full compliance
19 with the landscaping, if he will comply with the
20 landscape requirements, we feel for the small
21 personal property -- this is over near Howard High
22 School -- that this drainage would go into the system
23 and be into the creek quickly and there is not a
24 purpose for him to have detention. It will not
25 assist in reducing any possible drainage problems or

1 flooding in his area. The key is -- he's worked with
2 Carol quite a bit to come up with which plants he
3 will plant to give the proper screening because he is
4 commercial next to a residential area. We agree that
5 because there's no drainage problems in the area it
6 will quickly get to the creek and be out of the way.
7 He does not need to construct a detention pond.

8 MR. SHAW: I make a motion we approve.

9 CHAIRMAN CHILDERS: We've got a motion to
10 approve.

11 MR. POE: Second

12 CHAIRMAN CHILDERS: All in favor, say, aye.
13 Motion passed.

14 MS. PUTNAM: Those I need to re-collect so
15 I can give back.

16 MR. SHAW: He can't back out and not make
17 the changes on it; can he?

18 MS. PUTNAM: No, he can't. He knows us too
19 well. He's spent a lot of time with us.

20 MR. EVANS: Yeah. I need to bring my
21 suitcase.

22 MR. SHAW: I apologize. I've got to leave
23 right now.

24 BY MS. PUTNAM:

25 The final one is the one that we'll need

1 some discussion on from Mr. Price. This is a
2 proposed expansion of Tuftco Corporation at 2318
3 South Holtzclaw Avenue. The reason I've asked Mike
4 to present this is in our meeting with him of meeting
5 back and forth, he brought us a second proposal that
6 showed that he could put detention and he could meet
7 our requirements. Because he could do that, I have
8 asked him to come and explain his hardship. He
9 brought us a plan to show he could comply so I will
10 let him explain that for you.

11 BY MR. PRICE:

12 Basically, I've got a little handout here.
13 I'll give you more, since you don't have enough
14 paper. What you see here is about 1,260 square feet
15 that's being proposed on this particular development.
16 What you don't see is that on the overall picture
17 this represents a small portion of 12.33 acres that
18 the owner has. We're looking at a thousand square
19 feet of 12.33 acres. What we're indicating is, if we
20 don't do detention on this particular site, the net
21 increase over the entire 12 acres, is again less than
22 a cubic foot per second or eight gallons per second,
23 over 12 acres. It's not that we can't do it, it just
24 seems to be an undue hardship placed upon someone to
25 put in a detention pond when the overall net increase

1 is going to be minimal or negligible. You really
2 would not be able to see that. That was why we
3 requested that we be relieved from the requirement of
4 having to do detention.

5 CHAIRMAN CHILDERS: Carol, would you agree
6 with his assessment that the impact would be
7 negligible?

8 MS. PUTNAM: The impact is negligible just
9 as the others. They're very small. This particular
10 site drains into the interstate right-of-way and then
11 on into a large wetland.

12 CHAIRMAN CHILDERS: When compared to cost,
13 the cost would exceed the benefits or not?

14 MS. PUTNAM: The cost to put the part in
15 would probably, yes, exceed the benefits.

16 MR. POE: What would the cost of one this
17 size be?

18 MR. PRICE: A pond of this size, when you
19 add in the drainage structures, the grading
20 requirements and so forth, you're probably looking at
21 five or six thousand dollars, somewhere in there.

22 MS. PUTNAM: Usually what we do in cases
23 where we eliminate the need for the pond, we increase
24 the need for water quality. They have to put some
25 type of grass swale or something that will assist in

1 water quality so there may be a little bit on that.

2 CHAIRMAN CHILDERS: Is there a way to work
3 that out to be satisfactory to you?

4 MR. PRICE: Yes, there is. The area drains
5 into another existing parking lot where there is an
6 additional drain that's in there. If I'm not
7 mistaken, there's going to be an oil skimmer placed
8 in there. There will be some benefit to water
9 quality to offset this.

10 CHAIRMAN CHILDERS: Is that satisfactory to
11 Storm Water Management?

12 MS. PUTNAM: Yes.

13 MR. POE: I have a question, Carol. Do you
14 guys track that kind of activity to make sure people
15 just don't nickel and dime -- I'm not saying that you
16 are -- nickel and dime their way in by a little here
17 and a little there?

18 MS. PUTNAM: We have a concern of that
19 which is why we're very happy to start bringing them
20 to the Board because it gives us a very viable way to
21 track things, so that you don't have a square mile
22 and everybody's doing a half-acre tract. We've just
23 started this. We don't want that to be a future
24 problem. If we get lenient and then -- this is
25 really a silly thing to do for a half-acre

1 development or a small change -- that it doesn't
2 mushroom or snowball.

3 MR. PRICE: Typically, if someone brings a
4 half-acre or acre site to us and it's basically a
5 grass or a wooded area, you know right off-the-bat
6 you're going to be doing detention unless there's
7 just some really strange reason that would cause that
8 not to occur. It's only generally when you have
9 existing conditions, such as all of these we brought
10 up, where you're adding onto an existing facility
11 that --

12 MS. PUTNAM: That's true. When we look at
13 people that have a parcel of property that has not
14 been developed, if they come in and tell us they
15 can't meet the detention then we try to convince them
16 that they probably have the wrong piece of property.

17 CHAIRMAN CHILDERS: What's the pleasure of
18 the Board?

19 MR. POE: I move that we accept it.

20 MS. JAMES: Second it.

21 CHAIRMAN CHILDERS: Motion to second it.
22 All in favor say, aye. Opposed, no. This motion is
23 approved.

24 MR. PRICE: Thank you.

25 MS. PUTNAM: At this point, anybody that

1 would like to be dismissed is welcome to be
2 dismissed. We are going to cover something quickly
3 with Mike McMahan and then we'll cover the fees
4 quickly.

5 MR. POE: I would like to say one thing. I
6 thought your staff put on an excellent presentation.
7 You all did a lot of work and we do appreciate you.
8 I did hear Councilman Crockett earlier talk to you
9 and I would have to agree that a lot of times we
10 don't get to see everything that you do. I can see
11 that you're doing excellent work. I would just like
12 to compliment you and your whole staff.

13 MS. PUTNAM: Thank you very much. Mike, if
14 you'll give us a report.

15 BY MR. MCMAHAN:

16 I was asked to report on the case which was
17 originally captioned Vandergriff versus The City and
18 later became Rush versus The City. That case has
19 been successfully concluded. The case went to the
20 Sixth Circuit Court of Appeals. I argued it, I think
21 it was in June. We got a decision around mid-July.
22 Then they filed for a re-hearing. That is, they
23 asked the whole 15 or 16 judges to hear the case.
24 They refused to do so.

25 The decision is very well-founded in law

1 you might say now. The Sixth Circuit didn't write a
2 separate opinion. They said they thought Judge
3 Collier did a fine job.

4 In the process, the lawyers for the other
5 side did point out what I would have to candidly
6 admit were a few glitches in our ordinance. Of
7 course, we are working with the Storm Water
8 department and probably some time before the end of
9 the year we will come to you with some recommended
10 changes to the Ordinance to try to fill in a few of
11 the things that they talked about.

12 One of the big issues that they raised was
13 that we don't have a good enough definition of what
14 are the waters that we maintain. In other words,
15 what are the facilities that we maintain? Carol is
16 working off this map over here. That's sort of her
17 baseline and she's going to develop or her staff is
18 going to develop basically a map which will define
19 all the waters, all the areas, so that there's not a
20 question about whether or not this part drains
21 straight to the river or not. Basically, we hope to
22 tie that down very tight.

23 Now, there are a few parts there, which
24 probably upon further reflection were improperly
25 excluded and we may need to go back at some point and

1 make administrative corrections based on further
2 studies. All in all, we are very pleased with the
3 status of our Ordinance.

4 CHAIRMAN CHILDERS: We appreciate it.
5 Thank you, sir.

6 BY MS. PUTNAM:

7 We have two last issues. They are both to
8 do with fees. If you look in your package, you have
9 a single list that's all boxed in. It's in the very
10 back. Just look at the -- probably the last three
11 pages in there. The heading of this says,
12 "Unresolved Requests For Exemption Due To Non-Use Of
13 City System". What the Storm Water people did was,
14 the pairs that are in each of these basins, we gave
15 them each of the requests that came in. They went
16 and looked at that individual property to look at how
17 the storm water ran and what system did it run
18 through on its way to the Tennessee River.

19 As we did that, you will look under
20 the column, the recommended column and it says denial
21 or partial and the one that was approved we had
22 already handled. You have two partials and the rest
23 are denials. This will be the Storm Water Management
24 recommendation back to these people. We have a
25 letter drafted up that has asked them that if they

1 would like to set up a meeting, we will set up a
2 meeting with these drainage designers to go over what
3 the City has done downstream from them, what work we
4 have done and try to process it through. If they
5 still want to appeal it at the next board meeting,
6 you will know that these individuals would like to
7 come and appeal their requests.

8 Many of these are Quail Lane, which is in
9 Red Bank. We're still back up in this area here.
10 We've done considerable work of removing beavers'
11 dams, correcting pipe failures and many of those
12 areas where we would discuss each area and what work
13 we've done downstream. This is kind of a heads up
14 but I think that with the work we've done and the
15 conversations we've had, they should be able to see
16 the work we've done.

17 CHAIRMAN CHILDERS: I would suggest that in
18 each of these cases, you point out how the work that
19 you have done now brings their property under the
20 provisions of the ordinance, in that the storm water
21 run-off now does go through a conveyance maintained
22 by the City. I think that would probably minimize
23 the number that would probably come forward, if you
24 try to do that.

25 MS. PUTNAM: I think that's an excellent

1 idea. The last two sheets you have are much finer
2 print and we only brought these, again, for
3 information. These are people that have previously
4 received full storm water fee exemptions that do not
5 live on the Tennessee River. We're talking about
6 these people back here (Indicating). These people
7 out here (Indicating). The ones that are
8 considerably distant.

9 What we would like to let the Board know
10 we're going to do is, we're going to take each one of
11 these one at a time, look at the location of their
12 property. Where does the storm water go? How does
13 it run to the river? What work have we done? When
14 we meet with these people and talk to them and say,
15 we've done this work here and we feel that times have
16 changed, years have gone by. We have spent more and
17 more at Storm Water. We are now doing the work that
18 carries the storm water.

19 As we have worked, as you can see this down
20 here, the Reflection Riding (Indicating). They are
21 -- they have most of their property is wooded. The
22 storm water fee for wooded or forested property is
23 zero. We would like to look at some of these areas
24 that are almost all forested and take them off of
25 being exempt and charge them the zero storm water fee

1 that they should be charged, not an exemption.
2 Charge them zero because of their forested property.
3 What you have is, if the property is forested and you
4 have somebody between them and the Tennessee River
5 and you've done work in there, then you have
6 something that's difficult. We would like to look at
7 some of these areas that have been exempted.

8 I think that I'll introduce you to the
9 individual Storm Water people that are here. Doug,
10 you met, is over the water quality. Sue Marshall is
11 our computer expert that makes all these printouts
12 work and handles the storm water fee. Jim Higdon is
13 one of our design engineers. He's the one that's
14 managed the Highway 58 area. Gary Jackson is the
15 supervisor over the drainage designers. Shamir
16 Shenouda is our new registered engineer that we've
17 just hired. He also works for Gary. Carol Sivley
18 you met with the landscape. Ileana Speer is a
19 relatively new employee and she's also one of the
20 drainage design people. She's learning about
21 Tiftonia, which is a fascinating place to handle
22 drainage complaints.

23 BY CHAIRMAN CHILDERS:

24 I would like to say a couple of things. I
25 would like to thank Carol for the work she's done.

1 She's only been on the job about a year and we really
2 haven't had a chance to work with her that closely.
3 I think you can look at the quality of this work and
4 we certainly appreciate that. I also would like to
5 thank Mike for the successful resolution of this
6 legal case, especially since I was listed as the main
7 defendant.

8 MR. MCMAHAN: That was the biggest lift
9 I've ever had off my shoulders, I can tell you that.
10 We had at that point in time \$20,000,000 on the line.

11 CHAIRMAN CHILDERS: My wife also
12 appreciates you handling that satisfactory to keep me
13 out of jail. Thank you, sir.

14 Is there any other business that ought to
15 come before the group? I appreciate the Board being
16 here. Thank you so much. Our meeting is adjourned.

17
18 END OF MEETING
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REPORTER'S CERTIFICATE

STATE OF TENNESSEE:

COUNTY OF HAMILTON:

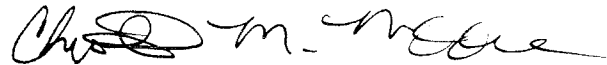
I, CHRISTINE M. MOORE, the officer before whom the foregoing meeting was taken, do hereby certify that the testimony heard was duly sworn by me;

That the testimony was taken by me in machine shorthand and thereafter reduced to typewriting; that the said testimony is a true record of the testimony given;

That I am neither counsel for, related to, nor employed by any of the parties to this action in which this meeting was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action;

That the said testimony has in no manner been changed or altered since same was given, but that the same has remained under my supervision up to the time of delivery.

In witness whereof, I have hereunto set my hand this 28th day of October, 1999.



CHRISTINE M. MOORE, Notary
Public in and for the State
of Tennessee at Large.

My commission expires:
November 22, 2000.